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Oligotrichum denudatum (Polytrichaceae), a New Moss Species from Minas Gerais, Brazil

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Among the bryophytes collected in Brazil in 1984 by Daniel M. Vital and William R. Buck is an interesting new species of *Oligotrichum* with elamellate leaves. The collection includes both male plants and female plants with mature sporophytes, making possible a full characterization of the species.

Oligotrichum denudatum Merrill, sp. nov. TYPE: Brazil. Minas Gerais: Mun. São Roque de Minas, mesic forest and riverside at base of waterfall, Parque Nacional da Serra da Canastra, Cachoeira Casca D'Anta, 20°18'S, 46°31'W, elevation 1,000 m, 19 Sep. 1984, *Vital & Buck V-11941* (holotype, NY; isotypes, KSC, MO, SP). Figure 1.

Inter species australes *Oligotrichi* ad *O. riedelianum* accedens sed foliis latioribus absque lamellis differt.

Plants caespitose, stems 3–5 cm tall (male plants taller, to 7 cm). Leaves distant to loosely imbricate, spreading when moist, crispate when dry, lanceolate, 3–5 mm long, 1 mm wide, unbordered, somewhat concave to channeled at the apex, the costa narrow and toothed on the back near the apex; leaves of male plants distant and smaller, concave, 2 mm long, 0.75 mm wide; leaf margins entire below, bluntly serrate in the upper ½; lamellae lacking (or rarely as traces at the apices of the perigonial and perichaetial leaves); median cells of lamina unistratose, rounded-quadrate to somewhat transversely elongate, 17–22 μm across, in ± regular longitudinal rows; median basal cells longitudinally elongate, rectangular, 35–50 μm long, shorter and quadrate at the margins. Dioicous. Perigonial bracts broadly triangular-ovate, forming a large, conspicuous rosette. Perichaetial leaves longer than the vegetative leaves. Setae slender, 2.5 cm long; capsules inclined to horizontal, oblong-cylindric, not angled, 4 mm long, 1–1.5 mm diam., with stomata near the base; exothecium smooth, the cells quadrate to transversely elongate, 35–50 μm across, cells around the stomates scarcely differentiated; peristome teeth 32, single, pale and attenuate. Calyptra smooth.

Additional specimen examined. BRAZIL. MINAS GERAIS: Mun. São Roque de Minas, type locality (see above), 19 Sep. 1984, *Vital & Buck V-11931* (NY, SP).

The specific epithet "denudatum" refers to the absence of lamellae as well as to the lack of hairs on the calyptra. *Oligotrichum denudatum* belongs to the southern hemisphere group of species of *Oligotrichum* (see Smith, 1971), which is characterized by simple (single), attenuate peristome teeth. The related Brazilian species, *Oligotrichum riedelianum* (Mont.) Mitt., has well-formed lamellae on the midrib, and leaves that tend to be narrower and more linear than those of *O. denudatum*. *Oligotrichum denudatum* might be confused with *Atrichopsis compressa* (Hook. f. & Wilson) G. L. Smith (*A. magellanica* Card.), which also lacks lamellae but has a bistratose lamina and leaves densely cuticular-papillose on both surfaces in the upper half (Smith, 1969).

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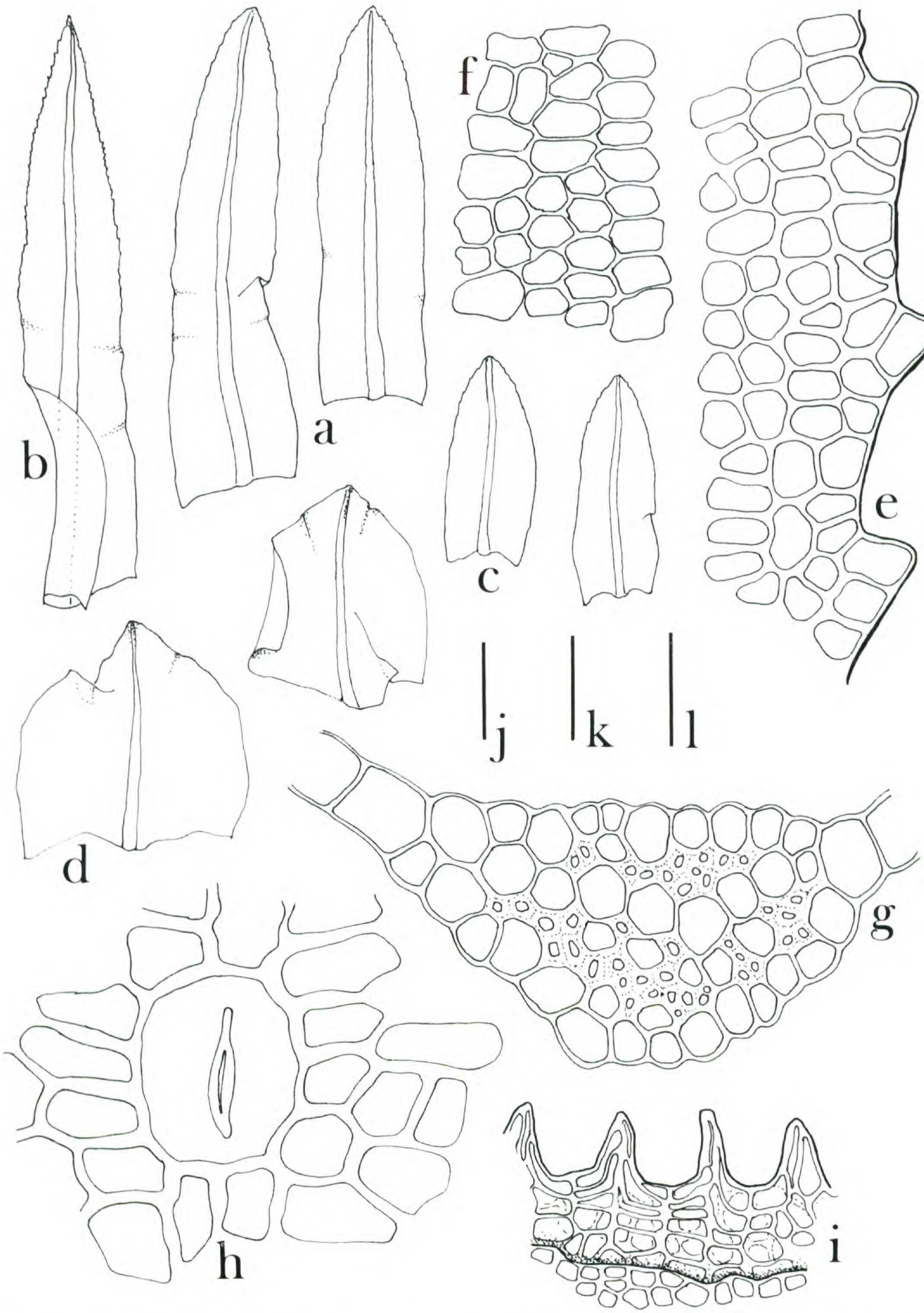

Figure 1. *Oligotrichum denudatum* Merrill. —a. Leaves of female plant. —b. Perichaetial leaf. —c. Leaves of male plant. —d. Perigonial leaves. —e. Cells of upper leaf margin. —f. Median leaf cells. —g. Cross section of costa. —h. Exothecial cells and stoma. —i. Peristome. Scales j = 1 mm (a–d); k = 0.03 mm (e–h); l = 0.1 mm (i). (All drawings from the type.)

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